Commonwealth of Kentucky

Environmental and Public Protection Cabinet Department for Environmental Protection

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Proposed

AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Texas Gas Transmission LLC

Mailing Address: P.O. Box 20008, Owensboro, KY 42304

Source Name: Texas Gas Transmission LLC

Midland III Compressor Station

Mailing Address: 650 Highway 175 South

Bremen, KY 42325

Source Location: 650 Highway 175 South

Permit: V-05-017 R1

Agency Interest: 44340

Activity: APE20070001

Review Type: Title V / Synthetic Minor, Construction / Operating

Source ID: 21-177-00066

Regional Office: Owensboro Regional Office

3032 Alvey Park Dr. W., Suite 700

Owensboro, KY 42303

(270) 687-7304

County: Muhlenberg

Application

Complete Date: August 16, 2007 (Revision 1)

Issuance Date: April 26, 2005
Revision Date: January 24, 2008
Expiration Date: April 26, 2010

John S. Lyons, Director Division for Air Quality

Revised 05/07/07

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	Permit	Activity#	Complete	Issuance	Summary of
	type		Date	Date	Action
V-05-017	Renewal	APE20040001	9/25/04	9/22/05	Renewal Operating/Construction Permit
V-05-017 R1	Significant Revision	APE20070001	8/17/07	1/24/08	Replacing two compression engines (RC01 & RC02) with one natural gas turbine (TB03)

Permit Number: <u>V-05-017 R1</u> **Page:** 1 **of** 23

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 03 (RC03)

One 2-Cycle Lean Burn Natural Gas Fired Reciprocating Compressor

Description:

Engine	Equipment Name	Manufacturer	Model	Installed	Capacity
<u>ID</u>					mmBtu/hr
RC03	Compressor Engine #3	Cooper-Bessemer	GMVH-10M/C	Oct. 1980	20.78

Primary Fuel: Natural Gas

Controls: None

APPLICABLE REGULATIONS:

State-Origin Applicable Regulations:

401 KAR 63:020, applies to sources commenced construction after April 9, 1972 that emit potentially hazardous matter or toxic substances.

NON-APPLICABLE REGULATIONS:

40 CFR Part 63, Subpart ZZZZ <u>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)</u>, applies to stationary RICE that are located at major sources of HAPs. This facility is not a major source of HAP and this regulation therefore does not apply.

1. Operating Limitations:

- a. Refer to section D.3 for source-wide hazardous air pollutant (HAPs) emission limitations
- b. Pursuant to 401 KAR 63:020, persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the outmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:

Compliance with 401 KAR 63:020 is demonstrated while burning natural gas at the designed maximum capacity of the unit. If the unit is modified, modeling of air toxics may be required.

2. Emission Limitations: Refer to Section D

3. <u>Testing Requirements:</u> None

4. Monitoring Requirements:
 5. Recordkeeping Requirements:
 Refer to Sections D and Section F

6. Reporting Requirements: Refer to Section D and section F

7. **Specific Control Equipment Operating Conditions:** None

8. Alternate Operating Scenarios: None

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 04 (TB01), 05 (TB02), and 06 (TB03)

Three Gas Compressor Turbines

Unit ID	Manufacturer	Taurus Model	Installation Date	Fuel	Rated mmBtu/hr
TB01	Solar	60-T7800S	9/29/2005	Natural	61.21
				gas only	
TB02	Solar	60-T7800S	9/30/2005	Natural	61.21
				gas only	
TB03	Centaur	50-6200LS	3/1/2008	Natural	52.48
				gas only	

APPLICABLE REGULATIONS:

40 CFR 60.330-335 (Subpart GG) Standards of Performance for Stationary Gas Turbines (Applies only to TB01 and TB02).

40 CFR 60.8 (Subpart A) Standard of performance tests.

40 CFR 60 Subpart KKKK, Standard of Performance for stationary Combustion Turbines. (Applies only to TB03).

State-Origin Applicable Regulations:

401 KAR 63:020, applies to sources commenced construction after April 9, 1972 that emit potentially hazardous matter or toxic substances.

NON-APPLICABLE REGULATIONS:

40 CFR Part 63, Subpart YYYY <u>National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines</u>, applies to stationary turbines that are a major source of HAPs. This facility is not a major source of HAP and this regulation therefore does not apply.

1. Operating Limitations:

- a. To preclude the prevention of significant deterioration of air quality (PSD) requirements, the compressor turbines (TB01 and TB02) are limited to a total of 11,600 operating hours per year in order to limit the NOx emission from the turbines TB01 and TB02 to less than 40 tons per year.
- b. Pursuant to 40 CFR 60.333, the fuel for TB01 and TB02 must either have a sulfur content less than or equivalent to 0.8% by weight or the flue gas must have sulfur dioxide content less than 0.015% by volume at 15% oxygen on a dry basis.
- c. Pursuant to 401 KAR 63:020, persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

- a. For compliance with the hours per year operating limit, refer to monitoring and requirements. recordkeeping
- b. For compliance with the fuel sulfur content limit, refer to monitoring and recordkeeping requirements.
- c. Pursuant to 401 KAR 63:020, compliance is demonstrated while burning only natural gas.

2. **Emission Limitations:**

- a. According to 40 CFR 60.332(a)(2), emissions of nitrogen oxides from each turbine (TB01 and TB02) shall be less than 192 parts per million volume on a dry basis, corrected to 15 percent oxygen (ppmvd @ 15% O₂).
- b. According to 40 CFR 60.4320(a), emissions of nitrogen oxides from the turbine (TB03) shall be less than 25 parts per million volume on a dry basis, corrected to 15 percent oxygen (ppmvd @ 15% O₂).
- c. According to 40 CFR 60.4330(a)(2) the fuel for TB03 must contain total potential sulfur emissions of 0.060 lb SO₂/mmBtu or less.
- d. The total combined NO_x emission from the turbines TB01 and TB02 must be less than 40 tons per year to preclude the prevention of significant deterioration (PSD) requirements.

Compliance Demonstration Method:

a. For TB01 and TB02 and per 40 CFR 60.335(b)(1), compliance with the aforementioned limit for NO_x shall be determined by the following formula: $NO_x = NO_{xo} * (P_r/P_o)^{0.5} * exp^{19* (Ho - 0.00633)} * (288 / T_a)^{1.53}$

where: NO_x = Emission concentration of NO_x at 15% O_2 and ISO standard ambient conditions, ppm by volume, dry basis

 NO_{xo} = Mean observed NO_x concentration, ppm by volume, dry basis, at 15% O_2

P_r = Reference combustor inlet absolute pressure at 101.3 kPa ambient, mm Hg

P_o = Observed combustor inlet absolute pressure at test, mm Hg

 $H_0 = Observed humidity of ambient air, grams <math>H_2O / gram air$

exp = transcendental constant, 2.718

 $T_a = Ambient temperature, K$

b. For TB03, annual performance tests shall be conducted pursuant to 40 CFR 60.4340(a) to demonstrate continuous compliance with the NO_x standard. If the NO_x emission result is less than 75% of the standard (18.75 ppmvd @15% O₂), then the testing frequency can be reduced to every two years per 40 CFR 60.4340 (a). The performance testing must be conducted in accordance with 40 CFR 60.8 and 60.4400.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. For TB03 and per 40 CFR 60.4365(a), a current valid tariff sheet specifying that the natural gas transported (and therefore burned) by this station has a total sulfur content less than 20 grains sulfur per 100 standard cubic feet of gas will demonstrate compliance with the fuel sulfur limit, A copy of the FERC Tariff sheet covering this facility will be kept on-site.
- d. For compliance with the 40 tons/year NO_x limit from TB01 and TB02, refer to Operating Limitations 1.a.

3. <u>Testing Requirements:</u>

- a. Per 40 CFR 60.8 Appendix A, test methods shall be utilized to conduct the required performance tests.
- b. As specified in 40 CFR 60.335(b)(2) for TB01 and TB02, the 3-run performance test must be performed within ± 5 percent at 30%, 50%, 75% and 90 to 100% of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90 to 100 percent of peak load.
- c. Method 20 shall be used to determine the concentration of NOx, SO₂, and O₂.
- d. For TB03: Annual performance tests are required pursuant to 40 CFR 60.4340(a) to demonstrate continuous compliance with the NO_x standard. If the NO_x emission result in less than 75% of the standard (18.75 ppmvd @ 15% O₂) then the testing frequency can be reduced to every two years per 40 CFR 60.4340(a). The performance testing must be conducted in accordance with 40 CFR 60.8 and 60.4400.

4. **Specific Monitoring Requirements:**

- a. Pursuant to 40 CFR 60.334(f)(2) for TB01 and TB02, whenever one of the turbines is operating the permittee shall continuously monitor that it is operating in the lean premixed (low NO_x) mode. This determination shall be based on parameters identified by the turbines' manufacturer. Pursuant to 40 CFR 60.334(g), these parameters shall also be monitored during the performance test required under 40 CFR 60.8 and referenced in item 3 above.
- b. For TB01 and TB02, the total sulfur content monitoring requirements of 40 CFR 60.334(h)(1) and (2) shall be followed, or the owner/operator may demonstrate that the turbines gaseous fuel meets the definition of natural gas in 40 CFR 60.331(u). The owner/operator shall use one of the following sources of information to make the required demonstration:
 - i. The gas quality characteristics data in a current, valid purchase contract, tariff sheet or transportation contract for the turbines gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
 - ii. Representative fuel sampling data, showing that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of 40 CFR is required.

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SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Per 40 CFR 60.4365(a) for TB03, a current valid tariff sheet specifying that the natural gas transported (and therefore burned) by this station has a total sulfur content less than 20 grains sulfur per 100 standard cubic feet of gas will demonstrate compliance with the fuel sulfur limit, A copy of the FERC Tariff sheet covering this facility will be kept on-site. As such, the unit (TB03) is exempt from any fuel sulfur content monitoring.

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 40 CFR 60.334(f)(2), the records of TB01 and TB02 operating mode (lean premixed vs. non-lean premixed) shall be kept for purpose of determining the operation mode. One record shall be required every hour.
- b. A parameter monitoring plan for TB01 and TB02 meeting the requirements of 40 CFR 60.334(g) must also be developed and kept on-site.
- c. To demonstrate compliance with the fuel sulfur limit for TB03 and document exemption from the monitoring requirements, a copy of a current, valid tariff sheet must be kept on site. This sheet meets the requirements of 40 CFR 60.4365(a).
- d. Records of the monthly operating hours for each turbine shall be maintained along with the 12-month rolling total operating hours.

6. Specific Reporting Requirements:

- a. Pursuant to 40 CFR 60.334(j), reports for TB01 and TB02 shall be submitted for any periods of excess emissions or monitor downtime. Pursuant to 40 CFR 60.334(j)(iii)(A), an excess emission shall be reported for any 4-hour rolling average in which any monitored parameter is outside of its acceptable range [i.e., the 4-hour average of the monitored parameter(s) demonstrate that a turbine was not operating in the lean premixed mode]. A period of monitor downtime shall be reported for any unit-operating hour in which any of the required parameter data are not recorded or are invalid.
- b. These reports shall be submitted in accordance with the conditions set forth in Section F 5
- c. For TB03: A test report meeting the requirements of 40 CFR 60, Appendix A, must be submitted within 60 days of completing the testing [40 CFR 60.4375(b)].
- d. The 12-month rolling total operating hours shall be reported for the turbines (TB01-TB02) as part of the semi-annual report required under Condition F.5.

7.	Specific	Control Ed	quipment O	perating	Conditions	: ſ	None
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8. Alternate Operating Scenarios: None

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 07 (GD01), 08 (GD02), 09 (GD03, and 10 (GD04) Glycol Dehydration Units

Four Glycol dehydration process units

- 4 Absorption columns of varying capacities
- 4 Glycol regeneration systems of varying capacities
- 2 Thermal oxidizers (Flares) for VOC/HAP emission control

APPLICABLE REGULATIONS:

401 KAR 50:055, Section 2(5) applies for determination of acceptable operating and maintenance procedures.

401 KAR 63:015, Section 3, Standard for particulate matter emissions from flares which shall not be more than 20 percent opacity for more than three (3) minutes in any one (1) day.

State-Origin Applicable Regulation:

401 KAR 63:020, Potentially hazardous matter or toxic substances.

NON-APPLICABLE REGULATIONS:

401 KAR 63:002, (40 CFR Part 63, Subpart HHH), <u>National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities</u>, applies to glycol dehydration units operated by natural gas transmission and storage facilities which are major sources of HAPs based on maximum natural gas throughput and meet the applicability requirements defined in 40 CFR 63.1270 of Subpart HHH. This facility is not a major source of HAP and this regulation therefore does not apply.

1. **Operating Limitations:**

Pursuant to 401 KAR 63:020, persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals, and plants. Evaluation of such facilities as to adequacy of the controls and/or procedures and emission potential will be made on and individual basis by the cabinet.

Compliance Demonstration Method:

For compliance with 401 KAR 63:020, compliance is demonstrated by proper operation and maintenance of the thermal oxidizers any time a glycol dehydration process unit is in operation.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations:</u>

- a. Per 401 KAR 63:015 emissions of particulate matters from each flare shall not exceed 20% opacity for more than three minutes in any one day.
- b. To preclude applicability of 40 CFR Part 63, Subpart HHH, source wide emissions of total HAPs shall be less than 22.5 tons per year.

Compliance Demonstration Method:

- a. For compliance with the opacity limit, refer to monitoring and recordkeeping.
- b. To preclude 40 CFR Part 63, Subpart HHH, the thermal oxidizer shall be operating according to manufacturer specifications any time a glycol dehydration process unit is in operation.

3. <u>Testing Requirements:</u>

Refer to 4. Specific Monitoring Requirements.

4. **Specific Monitoring Requirements:**

- a. The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observation. If visible emissions from a stack are seen, then the opacity shall be determined by EPA Reference Method 22 and an inspection shall be initiated for any necessary repairs.
- b. Per 401 KAR 50:055 Section 2(5) operating and maintenance procedure information (monitoring results, opacity observations, and inspections of the source) must be available to the cabinet for determination of compliance. Refer to Section F.

5. Specific Recordkeeping Requirements:

Refer to Section F.

Specific Reporting Requirements:

- a. The permittee shall maintain records of the weekly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 22, if any were taken, and repairs that were made to any opacity reading which exceeded the standard.
- b. Refer to Section F.

7. Specific Control Equipment Operating Conditions:

The still vent emissions from the glycol dehydrations systems shall be routed to one of the thermal oxidizers (Flares) for VOC and HAP emission control.

8. Alternate Operating Scenarios:

None

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Storage Vessels for Volatile Organic Liquids (VOL)

Storage Vessels with capacity greater than or equal to 40 m³ (10,567 gallons)

Tank ID	Tank Contents	Capacity	Installation Date
TK06	Ethylene Glycol	11,750 gallons	December 1973
TK07	Lubricating Oil	11,750 gallons	December 1973

APPLICABLE REGULATIONS:

State-Origin Applicable Regulation:

401 KAR 63:020, Potentially hazardous matter or toxic substances.

NON-APPLICABLE REGULATIONS:

401 KAR 59:485, Standards of performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, incorporating 40 CFR 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, by reference. This regulation does not apply to these tanks since they were installed prior to July 23, 1984. All other tanks at this facility have capacities less than 10,567 gallons.

1. **Operating Limitations:**

Pursuant to 401 KAR 63:020, persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the Cabinet.

Compliance Demonstration Method:

Compliance with 401 KAR 63:020 is demonstrated at the current design, contents, and maximum

capacity of the unit. If the unit is modified, modeling of air toxic may be required.

2.	Emission Limitations:	None
3.	Testing Requirements:	None
4.	Specific Monitoring Requirements:	Refer to Section F
5.	Specific Recordkeeping Requirements:	Refer to Section F
6.	Specific Reporting Requirements:	Refer to Section F
7.	Specific Control Equipment Operating Conditions:	None
8.	Alternate Operating Scenarios:	None

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause, and any corrective actions taken due to abnormal visible emissions.

Description

Generally Applicable Regulation

1. Auxiliary Air Compressor (35 bhp)	None
2. Comm. Emergency Generator (30 bhp)	None
3. Glycol Reboiler #1 (0.75 MMBtu/hr)	None
4. Glycol Reboiler #2 (0.75 MMBtu/hr)	None
5. Glycol Reboiler #3 (0.75 MMBtu/hr)	None
6. Fuel Gas Heater (1.00 MMBtu/hr)	None
7. Engine Room Heater (2.0 MMBtu/hr)	None
8. Turbine Fuel Gas Heater #1 (3.15 MMBtu/hr)	None
9. Turbine Fuel Gas Heater #2 (3.15 MMBtu/hr)	None
10. Diesel Fuel Tank (950 gallons)	None
11. Methanol Tank (4,230 gallons)	None
12. Methanol Tank (4,230 gallons)	None
13. Lube Oil Tank (1,625 gallons)	None
14. Dehy Water Tank (8,450 gallons)	None
15. Ethylene Glycol Tank (11,750 gallons)	None
16. Lube Oil Tank (11,750 gallons)	None
17. Dehy Water Tank (8,450 gallons)	None
18. Triethylene Glycol Tank (6,496 gallons)	None
19. Triethylene Glycol Tank (6,496 gallons)	None
20. Reclaimed Glycol Tank (8,450 gallons)	None
21. Pipeline Distillate Tank (8,450 gallons)	None
22. Gasoline Tank (540 gallons)	None
23. Pad Water Tank (3,000 gallons)	None
24. Pad Water Tank (3,000 gallons)	None
25. Pipeline Distillate Tank (3,500 gallons)	None

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

- 2. Nitrogen Oxides (NO_x) and Visible emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
- 3. To preclude applicability of 40 CFR Part 63, Subpart ZZZZ and HHH, sourcewide emissions of a single HAP shall be less than 9.5 tons per year; and sourcewide emissions of total HAPs shall be less than 22.5 tons per year.

Compliance Demonstration Method:

For compliance with the single and total HAP emission limits, refer to limitation for emission unit 04.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail Suite B Frankfort, KY 40601-1758 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test required by the permit shall be submitted to the Division by the source or its representative within forty-five (45) days after the completion of the fieldwork.
- 12. Natural gas shall be the only fuel burned in the operation of combustion equipment identified as significant points of emission. Furthermore, the Permittee shall maintain all records of any changes in equipment or operation. The records required by the Division for Air Quality shall be retained at the source authorized by this permit for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division.

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SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

- g. Any condition or portion of this permit, which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in the permit and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points 06 (TB03) in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(2) The permitted facility was at the time being properly operated;

- (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

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SECTION H - ALTERNATE OPERATING SCENARIOS

ALTERNATE OPERATING SCENERIOS:

None

SECTION I - COMPLIANCE SCHEDULE

COMPLIANCE DEMONSTRATION SCHEDULE:

None